

**REMARKS**

In response to the Non-Final Office Action mailed March 16, 2009 (hereafter "Office Action"), claims 24, 33 and 34 have been amended, without the intention of changing the scope of the claimed invention. Claim 37 is newly added. No new matter has been added. Accordingly, claims 24-37 are pending, of which claims 34-36 have been withdrawn.

In view of the following comments, allowance of all the claims pending in the application is respectfully requested.

As a preliminary matter, Applicant disagrees with the Restriction Requirement for similar reasons as provided in the Response to Restriction Requirement filed October 19, 2007. Accordingly, Applicant reserves the right to petition the Restriction Requirement and/or to file a divisional application directed to withdrawn claims 34-36.

**Rejection Under 35 U.S.C. § 101**

Claims 28-33 were rejected under 35 U.S.C. § 101 as allegedly directed to non-statutory subject matter. In particular, the Office Action asserts that the claims 28-33 are allegedly not within one of the four statutory categories of invention enumerated under 35 U.S.C. § 101. Applicant traverses.

Applicant submits that claims 28-33 are directed to a method (i.e., a process), which is one of the four statutory categories of invention enumerated under 35 U.S.C. § 101.

Nonetheless, without agreeing or acceding to the propriety of this rejection, Applicant has amended claim 28 to recite "In a document handler and imaging system configured to sequentially move different document sheets past an imaging station by a document feeding system to be illuminated by a document illumination source and imaged by a document imager, a method of automatically detecting registration parameters for a selected backing surface, comprising ..."

Under *In re Bilski*, the Court of Appeals for the Federal Circuit held that "[a] claimed process is surely patent-eligible under § 101 if: (1) it is tied to a particular machine or

apparatus, or (2) it transforms a particular article into a different state or thing. " Slip Op., pg. 10 (October 30, 2008) (internal citations omitted).

Applicant submits that the claimed invention is clearly directed to a document handler and imaging system configured to sequentially move different document sheets past an imaging station by a document feeding system to be illuminated by a document illumination source and imaged by a document imager (i.e., a machine or apparatus).

Moreover, Applicant submits that the act of obtaining image data, via a document imager, converts physical information into electronic image data. Accordingly, the claimed invention transforms a particular article into a different state or thing.

For at least the foregoing reasons, Applicant submits that the claimed invention meets at least one, if not both, of the criteria of patentable subject matter set forth under *Bilski*.

Accordingly, claims 28-33 are directed to statutory subject matter. Thus, the rejection of claims 28-33 under 35 U.S.C. § 101 is improper and should be withdrawn.

#### **Rejection Under 35 U.S.C. § 112**

Claims 28-33 were rejected under 35 U.S.C. § 112, first paragraph, for allegedly failing to comply with the written description or enablement requirement. Applicant traverses.

Applicant submits that the specification clearly describes the claimed invention, i.e., a document handler and imaging system configured to sequentially move different document sheets past an imaging station by a document feeding system to be illuminated by a document illumination source and imaged by a document imager.

While the Office Action asserts that the claimed invention is not supported by either a substantial asserted utility or a well established utility and thus, one skilled in the art would not know how to use the claimed invention, Applicant submits that the Office fails to provide any explanation(s) to prove these assertions. This is improper.

In particular, MPEP 2107 provides:

***Any rejection based on lack of utility should include a detailed explanation why the claimed invention has no specific and***

***substantial credible utility.*** Whenever possible, the examiner should provide documentary evidence regardless of publication date (e.g., scientific or technical journals, excerpts from treatises or books, or U.S. or foreign patents) to support the factual basis for the *prima facie* showing of no specific and substantial credible utility. If documentary evidence is not available, the examiner should specifically explain the scientific basis for his or her factual conclusions.

[Emphasis added].

Similarly, MPEP § 2107.01 (IV) states "the factual showing needed to impose a rejection under 35 U.S.C. § 101 must be provided if a rejection under 35 U.S.C. § 112, first paragraph, is to be imposed on 'lack of utility' grounds." (emphasis added). The Office has not met its burden.

Notwithstanding this deficiency, Applicant submits that claims 28-33 are directed to a method (i.e., a process), which is one of the four statutory categories of invention enumerated under 35 U.S.C. § 101, and that claims satisfy the utility requirements of *In re Bilski*. [See the Response to § 101 rejection, *above*]. As such, since the rejection under § 101 is improper, so is the rejection under § 112, first paragraph.

For *at least* the foregoing reasons, Applicant submits that rejection of claims 28-33 under 35 U.S.C. § 112, first paragraph, is improper and should be withdrawn.

### **Rejection Under 35 U.S.C. § 103**

Claims 24-33 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Publication No. 2002/0126299 to Buchar *et al.* ("Buchar") in view of U.S. Patent No. 6,137,904 to Lubin *et al.* ("Lubin"). Applicant traverses.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Office to establish a factual basis to support the legal conclusion of obviousness. See *In re Fine*, 837 F.2d 1071, 1073 (Fed. Cir. 1988). In so doing, the Office must make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966). "[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of

unpatentability." *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). Indeed, "a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art." *KSR Int'l Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007) (citing *United States v. Adams*, 383 U.S. 39 (1966)). Rather, the proper test for obviousness is "... whether the improvement is more than the predictable use of prior art elements ***according to their established functions.***" 82 USPQ2d at 1396. (emphasis added).

Claim 24 recites, *inter alia*, the feature of:

a registration parameter detection circuit configured to:

- receive image data comprising a representative sample of the backing surface, the image data ***including chrominance values*** in multiple channels for selected pixel locations along a scanline;
- automatically ***determine an average chrominance values for each of the multiple channels;***
- select a registration channel based on the average chrominance values;
- determine ***a chrominance deviation*** for the registration channel; and
- determine a registration parameter based on the average chrominance value and the chrominance deviation of the registration channel.***

Similarly, claim 28 recites, *inter alia*, the features of:

obtaining image data comprising a representative sample of the backing surface, the image data ***including chrominance values*** in multiple channels for selected pixel locations along a scanline;

- determining average chrominance values for each of the multiple channels;***
- selecting a registration channel based on the average chrominance values;
- determining a chrominance deviation for the registration channel;*** and
- determining registration parameters based on the average chrominance value and the chrominance deviation of the registration channel.***

[Emphasis added].

The cited portions of Buchar and Lubin, either alone or in combination, do not teach or otherwise render obvious at least the above-emphasized features for *at least* the reasons that the (i) neither Buchar nor Lubin teach using chrominance values for detecting a registration parameters; and (ii) although Lubin teaches chrominance values, they are used for an entirely different purpose than Applicant claimed invention requires.

**I. Neither Buchar nor Lubin teach using chrominance values for detecting a registration parameters.**

Buchar discloses detecting gray level (i.e., luminance) values of the pixels corresponding to the ski for each channel, then performing edge detecting based on the detected luminance value. [See, e.g., Buchar, ¶ 33]. However, Buchar makes no mention or suggestion regarding using chrominance value, much less "a registration parameter detection circuit that is configured to ... determine a registration parameter based on chrominance values, much less determining registration parameters based on the average chrominance value and the chrominance deviation of the registration channel."

Further, even assuming *arguendo* that it was proper to combine Buchar and Lubin (which Applicant does not concede), Applicant submits that the cited portions of Lubin do not overcome the deficiencies of Buchar.

For example, the cited portions of Lubin make no mention or suggestion "a registration parameter detection circuit that is configured to ... determine a registration parameter based on chrominance values, much less determining registration parameters based on the average chrominance value and the chrominance deviation of the registration channel."

**II. Although Lubin teaches using chrominance values for an entirely different purpose than Applicant claimed invention requires.**

The Office Action merely asserts that Lubin teaches chrominance values. [See Office Action, pg. 6]. Even so, Lubin's use of chrominance values is for an entirely different purpose than claimed by Applicant.

For example, Lubin relates to assessing the effects of physical imaging parameters on the subjective performance of an imaging or other signal processing system and more specifically, to assess the visibility of difference between two signal sequences. Lubin further discloses a signal processing system having a perceptual metric generator that predicts the perceptual ratings that humans will assign to a degraded color-image sequence relative to its non-degraded counterpart. This perceptual metric generator include an input signal processing that transforms inputs signal into light outputs, then transforms the light outputs into psychophysically defined quantities that separately characterize luminance and chrominance.

The passage of Lubin which the Office Action refers to (i.e., col. 9, lines 3-9), discloses one of three options for specifying the vertical representation of RGB images, for each frame (in progressive images) and for odd and even fields (in interlaced images). [See Lubin, col. 8, lines 56-59]. Yet nowhere do the cited portions of Lubin make any mention or suggestion of a registration parameter detection circuit that determines a registration parameter based on chrominance values, let alone determining registration parameters based on the average chrominance value and the chrominance deviation of the registration channel. Indeed, specifying the vertical representation of RGB images on a display device is unrelated to determining a registration parameter.

In addition, the Office Action asserts that "YCbCr colorspace including chrominance has been known to be advantageous (as opposed to RGB or gray scale) for improved compression." [Office Action, pg. 3]. However, as previously pointed out by Applicant, the claimed invention does not concern, nor is it related to image data compression.

As such, Applicant submits that the Office Action has failed to demonstrate that the claimed invention is merely a "predictable use of prior art elements *according to their established functions*." KSR, 82 USPQ2d at 1396 (emphasis).

For *at least* the foregoing reasons, Appellant submits that a *prima facie* case of obviousness has not been established and that the cited portions of Buchar, Lubin, or a proper combination thereof fail to disclose or render obvious each and every feature recited by claims 24 and 28. Claims 25-27 and 29-33 depend from claims 24 and 28, respectively, and are patentable for at least the same reasons provided above related to claims 24 and 28, and for the additional features recited therein. Thus, Appellant respectfully submits that the rejection under 35 U.S.C. §103(a) of claims 24-33 over Buchar in view of Lubin should be withdrawn and the claims be allowed.

#### **New Claim**

Claim 37 depends from claim 28, and is patentable for at least the same reasons provided above related to claim 28, and for the additional features recited therein.

#### **Conclusion**

Having addressed each of the foregoing rejections, it is respectfully submitted that a full and complete response has been made to the outstanding Office Action and, as such, the application is in condition for allowance. Notice to that effect is respectfully requested.


If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

If an extension of time is necessary to prevent abandonment of this application, then such an extension of time is hereby petitioned for under 37 C.F.R. §1.136(a). Any fees required (including fees for net addition of claims) are hereby authorized to be charged to our Deposit Account No. 240037 (Ref. No. 089382-0379237).

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